Commercial Service Dominican Republic

Solid Waste Management and Handling Equipment

Summary

The Dominican Republic's rapid population growth, massive migration to urban areas, and increasing numbers of people living in poverty have resulted in serious deficiencies in the coverage and quality of water and sanitation services, including solid waste management. It was estimated that in 1995 drinking water supply reached 65% of the population— 80% of those in urban areas and 46% of the persons in rural areas. Of the country's 8,463 rural communities, only about 2,100, or 25%, had drinking water service, while sanitary sewage disposal service covered only 16% of the entire population and 28% of the urban population, in addition to a highly inefficient solid waste management system.

Drinking water, sewage services and solid waste handling represent a large share of the Government's social expenditures. Institutional weaknesses, staff turnover, and deficiencies in operating and maintaining systems all hamper the sector's ability to meet the basic sanitation needs of the population.

Solid waste collection and urban cleanup services are the responsibility of local municipalities. In almost all the cities, coverage is minimal, collection is sporadic, and solid waste is disposed of in open-air landfills. The administrative units of these services are weak and suffer from shortages of equipment, funding, and specialized personnel. Trash collection in the National District was privatized in 1992, and since then, services have improved in the residential areas. There are no special procedures or standards that apply to hospital solid waste.

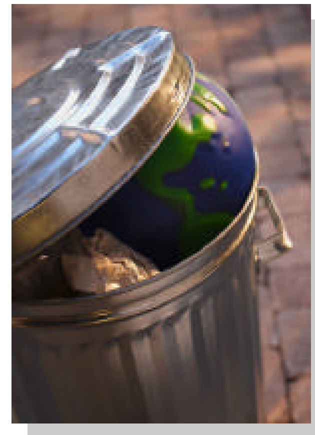
There is considerable pollution of groundwater and of beaches near the coastal cities. Sewage runoff and liquid and gas pollutants from industry and agriculture come under the responsibility of several different institutions, including the Secretariat for Environment and Natural Resources, the Secretariat for Public Health and Social Welfare, the National Water Supply and Sewerage Institute (INAPA), the municipal councils, the Secretariat of State of Agriculture, the National Bureau of Forestry, and other entities, none of which has specific policies or programs. There is also no specific legislation or adequate coordination, and resources to oversee these activities are very limited.

The drinking water, sanitation, and solid waste sectors have just recently embarked on a reform and modernization process. It draws its guidelines from the National Drinking Water Plan for Scattered Rural and Marginal Urban Areas and the National Social Development Plan. Both plans give priority to improving living conditions for the most disadvantaged populations.

There is no local production and technology to meet the demand of the market, the Dominican Republic has to import the key equipment needed for solid waste management and environmental technology. Among imports, U.S. products and technology are highly regarded and lead the market with over a 90% share, according to sources interviewed for this report.

The Dominican Republic's market of solid waste equipment and services presents good opportunities for U.S. companies.

Market Overview



Solid waste management systems present a variety of problems throughout their operational cycle (collection, transportation, recycling, and final disposal) countrywide. These problems are already serious and tend to aggravate in the capital city Santo Domingo.

As a result of a rapid urbanization, solid waste has become a pressing issue for most cities in the Dominican Republic. A population of more than 9 million people, with inefficient solid waste management, and combined with forthcoming stricter environmental requirements, will create business opportunities in this area for US companies in the sector.

The Dominican Republic produces over 6,000 tons of solid waste each day from various sources. More than 80 percent is from municipal sources, including households, hotels, resorts, restaurants, markets, and businesses. Industries generate 17 percent, making it the second most significant source. Industrial waste is mainly concentrated in the industrial parks, especially in the Cibao Region.

Fortunately, less than 1 percent of the Dominican Republic's waste is considered hazardous. In urban areas, the average collection rate is 60 percent, while in rural areas collection rates are typically less than 30 percent. Socialization programs, which delegate responsibility for waste management to local community groups, are becoming more notorious throughout the Dominican Republic.

Amount of solid waste per city / per day:

City	Tons
Santo Domingo National District	1,700
Santo Domingo / North and East	1,600
Santiago	700
Puerto Plata	350
Remaining cities	1,650
Total	6,000

Solid waste production daily / per capita: 0.8 – 1.5 pounds

Solid waste is one of the highest priorities for Dominican cities and small towns. According to the Secretariat for Environment and Natural Resources, nearly 90 percent of the municipalities surveyed identified solid waste management as one of their top environmental priorities. Some of the main challenges in solid waste management mentioned by the municipalities include lack of equipment and funds, and lack of public awareness. Capability for hazardous waste treatment is lacking as well. Currently, there are no facilities nor responsible entities to treat and dispose of many types of hazardous waste.

Waste handling in the Dominican Republic is mainly carried out by the municipalities (Mayors/ City Halls), which are responsible for the collection and disposal of municipal waste, including domestic, institutional, and in most cases also industrial and healthcare waste. Although there have been significant improvements in handling waste, most of the municipal waste in the Dominican Republic is not safely disposed.

The dominant form of disposal of municipal waste remains open dumping. In many areas, self-disposal methods – such as burning or burying waste, or dumping in rivers, canals (between 5-30% is dumped in canals), and open fields – is common. New landfill facilities are needed across the country. The development of waste treatment and disposal systems, which includes landfills, is a Dominican government priority.

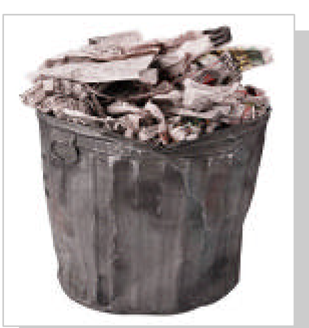
Given the lack of combined treatment facilities and limited incentives for safe disposal, many industries practice a variety of unsafe methods of treatment and disposal. In addition to an overall expansion in manufacturing within the Free Trade Zone Industrial Parks, growth in hazardous-waste-intensive industries such as chemical products is expected to increase the amount of hazardous waste generated in the Dominican Republic each year. There is an urgent need to establish industrial hazardous waste management systems, including both factory-based handling, treatment, and disposal systems, and centralized hazardous waste treatment facilities.

The organization of the Municipalities (Liga Municipal Dominicana) is negotiating with international financial organizations on a program to intervene into the current local management system. If the project moves forward, it would represent the first component of this program and would illustrate the problems linked with the generation, collection, transport, disposal, and destruction of organic and inorganic solid waste; determine the cost-benefit relationship of waste collection fees charged by the municipal government and the private sector (informal collectors included).

It is expected that this program would also evaluate the economic and social consequences of increasing the participation of informal waste collectors; review and evaluate options for an efficient, practical, and profitable system for the collection, transport, disposal, and destruction of solid organic and inorganic waste; and identify waste materials produced domestically, commercially, and industrially, which could be recycled, all the above incredibly important to solve the solid waste management inefficiency. For more information on this project, please contact the Sheila Andujar at the US Commercial Service in Santo Domingo or visit our web site www.BuyUSA.gov/caribbean.

Import Market

The Dominican Republic's total market for solid waste equipment is estimated to be $35 million in 2005, based on investment trends from 2001 to 2004. The average annual growth rate for demand of this type of equipment and services over the period 2005 - 2010 is projected at five to 15%. There is no local production of solid waste handling equipment or technology. The import market related to this sector is mainly for solid waste collection trucks, parts and trash containers.



The largest number of trucks comes from U.S. manufacturers such as Mack (market leader), International and Ford, followed by Asian suppliers. The majority of the trucks imported are refurbished. Price has been the best selling factor for the refurbished trucks. The Dominican Republic needs to import several waste treatment equipment and technologies including landfill equipment, incinerators, and composting equipment and technology. Local companies in the sector expressed their preference for U.S. brands.

Best Sales Prospects

The Liga Municipal Dominicana plans to make significant purchases of technology and equipment during the next few years as the project on solid waste management system is developed. Best prospects include the following products:

1. Urban Waste Collection and Transfer Vehicles:
-- Compressed Collectors.
-- Dumpsters.
-- Mechanical Transfer Station and related equipment.
-- Special urban vehicles with large capacities: garbage trucks, night-soil trucks, and highway cleaning trucks.

2. Auxiliary equipment and technology for landfills:
-- Landfill machinery: garbage compacting machinery such as landfill site slope compacting equipment.
-- Waste water drainage systems and materials.

3. Landfill Treatment.

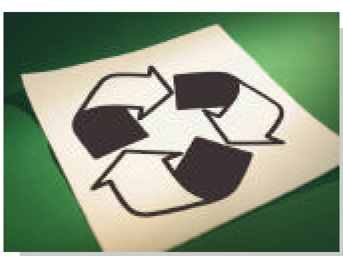
4. Waste Sorting Equipment.

5. Gas-fired incinerating technologies
-- Drum incinerator for centralized industrial hazardous wastes treatment.

6. Recycling:
-- Metals recycling and utilization equipment.
-- Small-medium sized waste metals compacting equipment.

End Users

The largest customers for imported solid waste equipment are municipalities of major cities and provincial towns. Additional customers include multinational companies that are operating within the free zone industrial parks, hotels and resorts in tourist areas such as La Romana, Bavaro, Punta Cana, Puerto Plata and Samana.



Market Access

U.S. environmental protection technologies are considered world class for quality, technology and reliability, however U.S. companies should take into consideration that price and financing are usually the determining factors for procurement decisions by private firms and municipal government organizations.

The general import climate in the Dominican Republic is still relatively favorable. There are no major trade barriers for the importation of solid waste management equipment and technology. The dollar exchange rate is responsive to market forces.

There are no regulations for the enforcement of quality, technical, or safety standards. U.S. standards are currently accepted and respected by the purchasing entities.

Although the import tariff rate for this kind of equipment currently varies between zero to 20 percent over the CIF value, the effective tax rate can go over 40 percent. This is a result of the application of other taxes such as the 16 percent value added tax (ITBIS), and the exchange surcharge tax of 13 percent.

Direct Imports Costs Template

Base Price	**US$100.00**
Exchange to pesos (US$1.00=RD$33.3*) (*) Official Exchange rate at Dominican Customs 11/15/05	RD$3,330
Freight & Insurance (average 8%)	RD$266.40
Dutiable Base = CIF in RD$ pesos	RD$3,596.40
3 percent Duty Rate (Arancel)	RD$ 107.89
Exchange surcharge 13 of CIF	RD$467.53
VAT Base	RD$4,171.82
(VAT=ITBIS 16 percent)	RD$667.49
	RD$4,839.31
Freight Forwarders fees (1.5% on CIF)	RD$72.59
Bank Charges - Draft of letter of credit 2% of CIF	RD$71.93
Landed Cost	RD$4,983.83 (US$149.66)

(*) All taxes are collected in Dominican pesos.
Before appointing an agent or distributor in the Dominican Republic, or registering a firm as a foreign investment, U.S. firms should seek legal counsel, and are advised to become familiar with the Dominican Agents and Distributors Protection Law (Law 173 dated April 6, 1966). Interested companies may also request a copy of Law 173 from the U.S. Commercial Service at the U.S. Embassy in Santo Domingo.

Impact of the CAFTA-DR on the Solid Waste Management and Handling Equipment Sub-Sector

The United States and Dominican Congresses recently approved the Central American Free Trade Agreement-Dominican Republic (CAFTA-DR). The agreement will greatly expand the bilateral trade between the participating countries; it will also allow for greater access for U.S. exports into the region. The member states of CAFTA-DR, combined, already constitute the 10th largest market for U.S. exports in the world. In 2004, the United States exported nearly $16 billion of manufactured goods to the region, of which 27% was exported to the Dominican Republic; the largest market among the CAFTA-DR partners. The United States exports 56% of all Dominican imports and enjoys a market share of over 70% in consumer goods imports into the Dominican Republic.

CAFTA-DR is expected to be implemented on January 1, 2006. However, the CAFTA-DR partners that have ratified or approved the agreement must formally agree on an implementation date. The U.S. Chamber of Commerce estimates that upon implementation of the CAFTA-DR, US exports to the region could grow by 20% in the first year. When implemented, CAFTA-DR provides for the immediate elimination of tariffs on 80% of all manufactured goods exported from the United States. Customs duties on the remaining 20% of products will be phased out over the next five to fifteen years. In addition, the CAFTA-DR will require each member country to take steps to improve government transparency, customs procedures and the protection of foreign investments.

Under the CAFTA-DR, US imports into the Dominican Republic have been classified by categories. Each category provides for the elimination of customs duties in different stages. Some products will enter the Dominican Republic duty-free on the date the agreement enters into force, while others will receive gradual reductions on the customs duties. Most of the products on the **Solid Waste Management and Handling Equipment Sub-Sector** have been categorized within the groups A and B. An explanation of these categories follows:

Category A:
Duties on goods under this category will be eliminated entirely on the date the agreement enters into force.

Category B:
Duties on goods in this category will be removed in five equal annual stages beginning on the date the agreement enters into force and will be duty-free effective January 1 of year five.

Author: Sheila de Andújar, Commercial Specialist, CS Santo Domingo
Date of Report: November, 2005
Phone: (809) 227-2121 ext. 222 **Fax**: (089) 920-0267
E-mail: sheila.andujar@mail.doc.gov Web: www.buyusa.gov/caribbean